



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

the Pacific Ocean by Prof. J. D. Dana, while in the United States Exploring Expedition. Others have been described and figured by Major Owen, in the *Microscopical Journal* for 1866:—

When these were taken, the sea was alive with them. When swallowed by, or entangled with other creatures, they in their turn appear to be also luminous. They also give luminosity to the water itself as it flows over them. When they are at rest, they gradually cease to give out light; but as soon as they are disturbed or in motion, or the vessel containing them is shaken, they again become bright, even after many hours' confinement. . . . I have seen the ship's deck running with liquid fire when the net containing this species had been taken on board.

CORRESPONDENCE.

L. Q., Pennsylvania, asks for information regarding the preparation of snail's tongues for microscopical objects. They are generally mounted in Canada balsam, using a thin piece of glass as a cover to the preparation.

To dissect the membrane from the mouth, one must use needles for the very small snails, and fine knives for the larger species. One can cut with certainty on such snails as *Helix albolabris*, by slitting the œsophagus open from above, care being taken not to cut the jaw, which can be plainly seen with the naked eye. The incision is made between the larger tentacles. The membrane bearing the minute teeth is quite tough, and can be picked away with needles. For the minute snails the readiest way is to pick the head in small pieces on a glass slide. With the microscope, the portion containing the tongue can be readily detected by the tessellated appearance of that organ. All other fragments are then wiped from the slide, and the membrane can be then separated by gently pulling apart the fragment into numerous pieces, and again examining with the glass, removing as before all the bits of muscular fibre not connected with the tongue. With considerable care and patience the tongue may be removed entire. During this work the preparation must be well moistened; a drop of water is sufficient.—E. S. M.

E. L., Illinois.—The following works have been published on North American Lichens:—"A Synopsis of the Lichens of New England, the other North American States, and British America." By Edward Tuckerman, A. M., Cambridge, 1848. 1 vol. 8vo, 93 pp. "An Enumeration of North American Lichens, with a Preliminary View of the Structure and General History of these Plants, and of the Friesian System," etc. By Edward Tuckerman, A. M. Cambridge, 1845. 8vo, pp. 59.

W. H. S., Minnesota.—You will find Shirley Hibbard's Book of the Aquarium, published in London, 1856, the cheapest and best manual

we know of. For fresh-water aquaria, use glass jars and dishes. Large aquaria can be made of glass set in a soapstone frame, made water-tight by cement. Any glazier can make one. Shirley Hibbard thus describes a large tank :—

“For the adornment of a dwelling-room, or a conservatory, an oblong tank, measuring three feet by one foot six inches deep, would be very suitable. It must be borne in mind, then, that when a tank is filled, its weight is enormous, and hence it is difficult, sometimes impossible, to move it without first removing the whole or greater portion of its contents. Strength in the joints to resist pressure from within, and strength in the table or other support on which the tank is placed, is of the first importance. The bottom of such a tank is best formed of a slab of slate, and the two ends may be of slate also; the front and back of plate or very stout crown glass. The most elegant form for such a body is that of the double cube, the length of the tank being just double its width and depth, so that if it were cut into two equal parts, two cubes would be formed. The glass must be set in grooves in the slate, and bound outside with zinc or turned pillars of birch wood. The best cement is white-lead putty, or what is known as Scott's Cement, the composition of which it is not in my power to inform the reader. If a coating of shell-lac, dissolved in naphtha, and made into a paste with whiting, were laid over the white lead cement, the water would be kept from contact with the lead, and the tank would require less seasoning.

The use of slate at the ends is to enable us to affix rock-work, or carry across a rude arch; the cement used in constructing rock-work does not adhere to glass. But if rock-work is not thought desirable, the slate ends may be dispensed with, and the vessel may be composed wholly of glass, except the bottom, which may be of slate or wood. I have seen some handsome tanks composed wholly of wood and glass; it is only necessary to choose well-seasoned material, and unite the joints very perfectly.

L. Q., Pennsylvania. — We can scarcely tell from your drawing what the object can be. It is probably a *Polyzoön*, and possibly a species of *Lophopus*, mentioned in the June number of the *NATURALIST*, and if so, is very rare, and specimens would be very desirable.

NATURAL HISTORY CALENDAR.

THE INSECTS OF AUGUST. — During this month great multitudes of bugs (*Hemiptera*) are found in our fields and gardens; and to this group of insects the present chapter shall be devoted. They are nearly all injurious to crops, as they live on the sap of plants, stinging them with their long suckers. Their continued attacks cause the leaves to wither and blight.

The grain Aphis, at certain years, desolates our wheat-fields. We have seen the heads black with these terrible pests. They pierce the grain, extract the sap, causing it to shrink and lose the greater part of its bulk. It is a most insidious and difficult foe to overcome.

The various leaf-hoppers, *Tettigonia* and *Ceresa*, abound on the leaves of plants, sadly blighting them; and the *Tettigonias* frequent